

WHAT IS CLAIMED IS:

1. A method of manufacturing a semiconductor device, said method comprising the steps of:

forming a hydrogen added layer by adding hydrogen to a first single crystal silicon substrate from a major surface side thereof, said first single crystal substrate having a silicon oxide film on the major surface;

bonding the first single crystal silicon substrate to a second substrate through the silicon oxide film, said second substrate being as a support;

separating the first single crystal silicon substrate by a first heat treatment;

carrying out a second heat treatment to a single crystal silicon film which remains on the second substrate in the separating step;

flattening a major surface of the single crystal silicon film;

forming a silicon island by patterning the single crystal silicon film; and

thermally oxidizing the silicon island.

2. A method of manufacturing a semiconductor device, said method comprising the steps of:

forming a hydrogen added layer by adding hydrogen to a first single crystal silicon substrate from a major surface side thereof, said first single crystal silicon substrate having a silicon oxide film on a major surface;

bonding the first single crystal silicon substrate to a second substrate through the silicon oxide film, said second substrate being as a support;

separating the first single crystal silicon substrate by a first heat treatment;

flattening a major surface of a single crystal silicon film which remains on the second substrate in the separating step;

forming a silicon island by patterning the single crystal silicon film; and

thermally oxidizing the silicon island.

3. A method according to claim 1, wherein the thermally oxidizing step is carried out at a temperature in a range of from 1050 to 1150°C.

4. A method according to claim 1, wherein the thermally oxidizing step is carried out in an oxidizing atmosphere comprising a halogen element.

5. A method according to claim 2, wherein the thermally oxidizing step is carried out at a temperature in a range of from 1050 to 1150°C.

6. A method according to claim 2, wherein the thermally oxidizing step is carried out in an oxidizing atmosphere comprising a halogen element.

7. A method according to claim 1, wherein said semiconductor device is one selected from the group consisting of a D/A converter, a γ correction circuit, and a signal dividing circuit.

8. A method according to claim 1, wherein said semiconductor device is one selected from the group consisting of a liquid crystal display device, an EL (electroluminescence) display device and an EC (electrochromic) display device.

9. A method according to claim 1, wherein said semiconductor device is a microprocessor.

10. A method according to claim 1, wherein said semiconductor device is a computer for controlling a vehicle such as car or an electric train.

11. A method according to claim 1, wherein said semiconductor device is one selected from the group consisting of a video camera, a digital camera, a projector (rear type or front type), a head mount display (a goggle type display), a car navigation system, a personal computer, a portable information terminal such as a mobile computer, a portable telephone, or an electric book.

12. A method according to claim 2, wherein said semiconductor device is one selected from the group consisting of a D/A converter, a γ correction circuit, and a signal dividing circuit.

13. A method according to claim 2, wherein said semiconductor device is one selected from the group consisting of a liquid crystal display device, an EL (electroluminescence) display device and an EC (electrochromic) display device.

14. A method according to claim 2, wherein said semiconductor device is a microprocessor.

15. A method according to claim 2, wherein said semiconductor device is a computer for controlling a vehicle such as car or an electric train.

16. A method according to claim 2, wherein said semiconductor device is one selected from the group consisting of a video camera, a digital camera, a projector (rear type or front type), a head mount display (a goggle type display), a car navigation system, a personal computer, a portable information terminal such as a mobile computer, a portable telephone, or an electric book.